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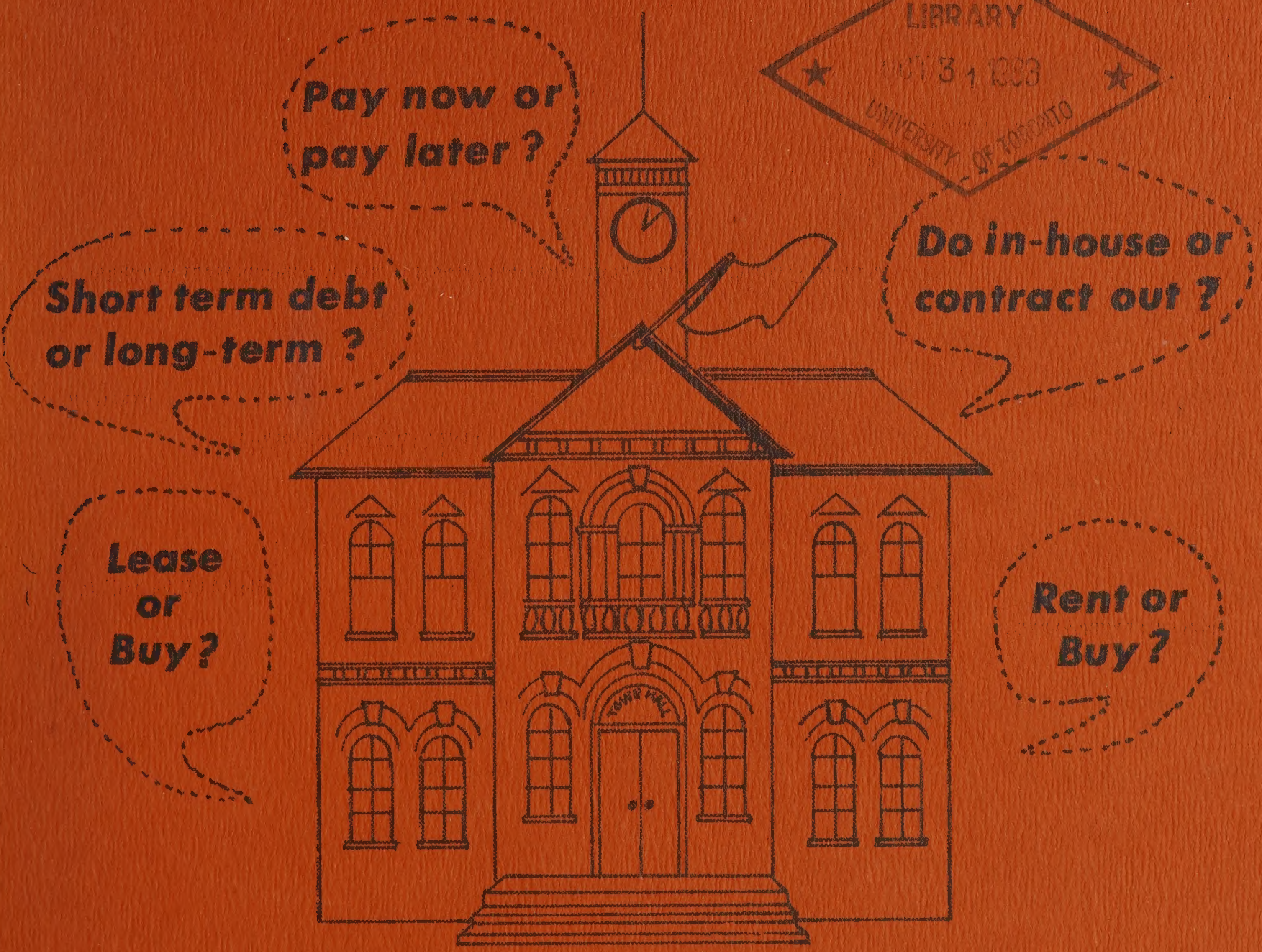
BULLETIN 50

ISSUES IN CAPITAL DECISION~MAKING



Ministry of Municipal Affairs and Housing

Ontario

Claude F. Bennett
Minister

Ward Cornell
Deputy Minister

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SUMMARY

This bulletin describes issues for local officials to consider when comparing different ways to acquire capital assets. Section I discusses the steps involved in making a capital decision. Section II lists factors relevant to those steps, including technological aspects, policy questions, administrative issues,and legal and financial concerns. Section III highlights the advantages and disadvantages of both purchase options and of non-purchase options.

This topic will be of interest to all local officials who manage or oversee capital programs in a municipality. It will be especially useful for municipal administrators who must make recommendations to council on capital acquisitions, and who must document the decision taken.

The intent of the bulletin is to help officials make capital decisions by offering a quick guide to some major factors to consider. It is another in a series of publications to help municipal managers handle their scarce resources efficiently and effectively.

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INTRODUCTION

In the municipal sector, as in any public service, officials are frequently called upon to make decisions that have an either/or quality. Deciding whether to contract out or to do a job in-house has this quality, as does deciding whether to lease or purchase a capital asset. Generally speaking, all capital decisions have this element of choosing between alternatives. First, the initial decision that the asset is indispensable is a yes or no question. Secondly, there are numerous ways to pay for the asset, having determined that its use is necessary. For example, in recent years a myriad of arrangements and terms and conditions have become available from capital leasing companies. Comparing the merits of leasing with debenture financing, or leasing with renting, or leasing with outright purchasing from reserve funds, can be a difficult exercise. Thirdly, each capital decision represents a choice between competing alternatives, a choice that is made once only. There are many factors that can affect the merits of each alternative, and this bulletin is a ready reference of some of the major ones.

Considerations to be taken into account in comparing capital options are both financial and nonfinancial. All have an effect on the capital acquisition decision and its immediate and long-term impact. This bulletin takes a broad look at the major concerns that come into play in making capital decisions. It includes a list of considerations that may help staff to prepare report recommendations, and to document the decisions taken. The report should be of interest to all local officials entrusted with making and documenting complex management choices.

CONSTRAINTS AND CHOICES

Local officials face a twofold problem today. At the same time as economic constraints are forcing a cost squeeze, citizens are demanding more and better services. Municipalities are responding by performing

better analysis before making capital decisions, and are also ensuring better documentation of the analysis. Citizens want to see a **visible** best buy for their tax dollar, and they want to know the trade-offs involved in a decision.

Capital decisions are especially vulnerable to these pressures. Capital items are usually very visible and have far-ranging impact. They bring recurring costs, in the form of operating and maintenance responsibilities, and may entail debt servicing costs as well. They may also be used to generate revenues, which can help to offset these costs. Sometimes the capital budget raises long-range questions that touch on the planning and staffing of an entire operation. For example, a capital lease directly affects a municipality's debt capacity since it forms part of the municipality's capital formation. Thus, the decision to acquire one large capital asset can limit future choices of assets and programs.

BASIC STEPS IN CAPITAL DECISIONS

All of this suggests that it can be helpful to break down a complex capital decision into basic steps. As a 1979 study[1] of 92 U.S. firms found, the decision to acquire an asset "precedes and is distinct from" the decision of how to pay for that asset. The recommended approach is to first determine that the acquisition is necessary and profitable before asking how it will be financed. In the municipal sector, because no income tax considerations apply, the decision can be represented very simply as shown in Figure 1.

This figure illustrates two important points:

- The decision whether or not to acquire the item is made prior to the financing decision (how to pay for the asset).
- Capital leasing is a form of debt. Therefore, the analysis of lease versus buy is performed after the initial decision and the analysis would compare leasing with other forms of financing, such as raising debenture funds.

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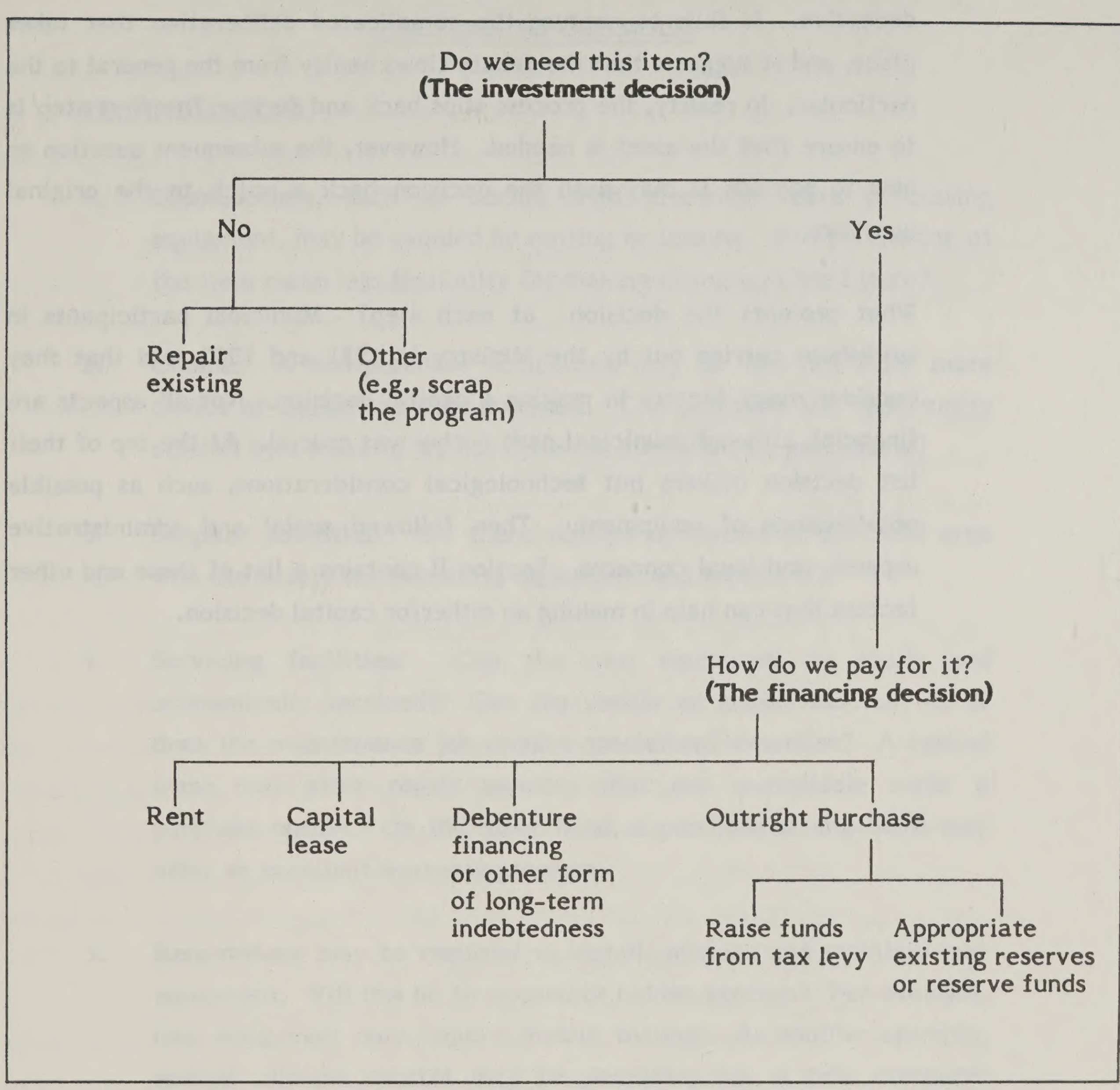
1 The National Association of Accountants, and The Society of Management Accountants of Canada, The Lease-Purchase Decision (New York, 1979),p.40.

FIGURE 1: STEPS TO A CAPITAL DECISION



Although Figure 1 makes the decision process look straightforward, it is deceptive. It fails to capture the complicated deliberation that takes place, and it suggests that the debate flows neatly from the general to the particular. In reality, the process slips back and forth. The first step is to ensure that the asset is needed. However, the subsequent question on how to pay for it may push the decision back a notch to the original question.

What prompts the decision at each step? Municipal participants in workshops carried out by the Ministry in 1981 and 1982 said that they consider many factors in making a capital decision. Not all aspects are financial, although municipal cash outlay was crucial. At the top of their list decision makers put technological considerations, such as possible obsolescence of equipment. Then followed social and administrative aspects, and legal concerns. Section II contains a list of these and other factors that can help in making an either/or capital decision.

SECTION II

FACTORS TO CONSIDER

TECHNOLOGICAL

1. **Obsolescence**, such as occurs with electronic data processing equipment, may be avoided by renting or leasing. Will purchasing of the item mean less flexibility for making changes in the future?

2. **Choice:** A non-purchase acquisition may or may not offer more choice of equipment than purchase. Can you take the opportunity offered by a lease to try out different items before purchasing?

3. **Supplier potential:** Are there vendors or lessors in the local area who can supply the necessary equipment and service it?

4. **Servicing facilities:** Can the new equipment be easily and economically serviced? Can the vendor or lessor maintain it, or does the maintenance job require specialized expertise? A capital lease may offer repair services that are unavailable under a purchase option. On the other hand, a purchase arrangement may offer an excellent warranty program.

5. **Renovations** may be required to install, operate and maintain new equipment. Will this be an unusual or hidden expense? For example, new equipment may require metric tooling. As another example, special climate control may be necessary for a new computer installation.

6. **Existing capacity:** Will existing facilities accommodate the new asset? For example, is the old fire hall large enough for new trucks?

7. **Effect on existing inventory:** Will the new item be compatible with the existing equipment? Will there be seasonal use only? Will the new item allow optimum use of present facilities?

POLICY

1. **Public opinion** and community acceptance of the need and demand for the item and its perceived payoff are important. Is pride of ownership important to the community? What is the local position on the pros and cons involved in any one method of acquisition?

2. **Employee attitude:** Will staff morale suffer because of disruptive change, or improve because of the new and modern equipment?

3. **Employee safety:** New equipment may be safer; conversely, adapting to new equipment may be less safe.

4. **Effect on long-range planning:** Purchasing commits the purchaser to a certain mix of equipment. Is flexibility important? Is the asset intended to meet immediate or long-term needs?

5. **Control:** Council may prefer the sense of ownership that accrues with outright purchase, giving an unfettered right to the asset. On the other hand, council may prefer the flexibility offered by a lease or rental arrangement, particularly in a rapidly changing technology. This sense of control or discretion may be a subtle matter of perception, and will depend on local circumstances as well as the type of asset under consideration.

6. **Accountability** is very clear in a rental or lease arrangement, since the contract spells out who pays, when, and how much for what item or service. Purchasing may result in less certainty about where the cost is allocated and who enjoys the use of the equipment.

7. **Decision-making process** may not allow detailed analysis of the options. The benefit of applying some analytic tools may not justify the cost and effort involved, for example. What decision-making techniques are preferred?

8. **Staffing:** How will the new asset affect your staffing complement, in both the short and long term? Will the decision entail the hiring or laying off of staff?

ADMINISTRATIVE

1. **Training:** Do you have adequately trained staff for the new acquisition? Can a lease include the equipment plus trained operators?

2. **Tendering procedures** may not be in place under by law and perhaps may not be practical in certain local situations. However, formal tendering has significant benefits and can yield a best buy which is visible.

3. **Insurance:** Are the existing policies on equipment and buildings adequate for the new item or should they be examined and revised?

LEGAL

1. **Effect on existing contracts:** Does the municipality have a union contract that prohibits a lease that includes operating personnel? What effect will the capital decision have on staff positions, job descriptions, number of personnel, remuneration, and so on?

2. **Jurisdiction:** Does council have the power to make a final decision or is the approval of the OMB required? What is the enabling legislation?

3. **Contract terms:** Determine exactly the terms and conditions of the contract, whether it be purchase, lease or rental. Are the terms negotiable? For example, some lessors have a standard contract that cannot be changed.

4. **Warranty:** What guarantees are extended if you purchase the item? If considering a lease, will the lessor contract to maintain the equipment for the period of the lease? How do the warranties in each case compare?

FINANCIAL

1. **Financing:** What are the sources of financing and how certain are they? For example, if the financing includes a high percentage of public donation, collectibility may be uncertain. Are you protected in the event of this loss through OMB approval to issue a debenture or other long-term financing?

2. **Capital costs:** What are the costs of installation, renovations, purchase price, start-up costs, design costs, and other front-end payments? Will the residual salvage value of the asset near the end of its economic life help to reduce the initial outlay.

3. **Operating costs:** These may include repair and maintenance costs, minus any revenue such as user fees and subsidies generated by the asset. In some cases, repairs may be covered by the lessor.

4. **Revenue:** Can you forecast potential revenue accurately? How stable would revenues be?

5. **Marginal capital costs and benefits:** Different project options may be eligible for varying levels of capital grants. Also, when looking at lease arrangements, consider the lessor's cost of doing business. Does the leasing company benefit from economies of scale, tax allowances, specialized expertise, and stronger financial bargaining position? Will these economies be passed on to and realized by the municipality? Are you getting a better deal than doing the job in-house?

6. **Marginal operating costs and benefits:** Operating costs for a labour-intensive project may escalate more quickly than for a capital-intensive project. Similarly, costs may escalate more quickly if

there is a large energy component than if the project is geared to lower energy consumption. Another example of marginal costs is the fact that greater usage may bring greater maintenance costs.

7. **Financial indicators:** There are many choices of indicators to use to compare costs and benefits, such as:

   1. shortest payback period;
   2. least present value of costs (or highest present value of benefits);
   3. best rate of return.

   Each indicator has its advantages and disadvantages, and one may be more appropriate to your situation than the other two.

HIGHLIGHTS OF OPTIONS

As the list of considerations shows, there are advantages and disadvantages to the many ways to acquire capital assets. Figure 2 summarizes the pros and cons of purchasing, including both outright purchase and purchase by raising debenture funds. Similarly, Figure 3 summarizes the pros and cons of the non-purchase options of renting and leasing. As indicated in both figures, only a cost/benefit analysis at the time that the capital decision is made can show which arrangement offers the best buy and has the most merit for each municipality.

FIGURE 2: PURCHASE OPTIONS

Advantages of purchasing	Disadvantages of purchasing
. Purchasing confers title and all the benefits that ownership implies, such as relative unfettered use of the asset, and freedom to dispose of it.	. Conferring title brings the risks and liabilities of ownership, such as maintenance costs, insurance, and responsibility for disposal at the end of economic life
. Purchasing implies that the owner has the right to sell the asset at any time. If there is a market, the owner can sell or trade up to better equipment.	. If there is no market, the owner is stuck with an asset that may be obsolete and worn out.
. Local officials may feel they have more control by acquiring ownership than by acquiring use of the asset through a capital lease or a rental agreement.	. Local officials may feel locked into a capital formation which allows less flexibility than renting or leasing.
. Outright purchasing can be cheaper than financing, especially if the municipality has reserves or reserve funds. In addition, purchasing by marketing a debenture can be cheaper than leasing if the municipality's borrowing rate is better than that of the leasing company. Only a cost/benefit analysis at the time of the capital decision can determine which arrangement is most worthwhile.	. Purchasing can be more expensive than leasing or renting. To determine the best buy,the present value of the payments is compared to the present value of cash outlay for purchase. Again, the merits of each particular situation must be established at the time of the decision.

FIGURE 3: NON-PURCHASE OPTIONS

Advantages of non-purchase options	Disadvantages of non-purchase options
. One form of financing, capital lease, transfers all the benefits of ownership from the lessor (leasing company) to the lessee.	. A capital lease also transfers the risks and liabilities of ownership from the lessor to the lessee. Other options such as renting do not confer ownership on the municipality.
. Leasing or renting can avoid obsolescence, if the terms allow the municipality to trade up at any time.	. A financial contract such as leasing can be inconvenient and rigid if it locks the municipality into equipment that becomes obsolete or worn out.
. Rent or lease payments are predictable and stable and so are debenture payments. Purchasing by using current revenues can mean 'lumpy' cash outlays that are inconvenient and may not be palatable to the taxpayer.	. Although installment payments are predictable, their impact may be difficult to determine. For example, the present value of the flow of lease or rental cash outlays can be difficult to calculate because one must accurately predict the future cost of capital, among other things.
. Local officials may feel they have more discretion with capital leasing or renting if the lease or agreement can be terminated. Exchanging an owned asset can be more difficult.	. Local officials may feel they have less control with a leasing or renting arrangement, since ownership allows the owner free rein with the asset.
. Lease terms can be structured to the lessee's cash flow needs. For example, the lessee can choose between a bulk payment at the beginning (front-end loading) or at the end of term (ballooning). Also, at the end of lease term, the lessee can buy the asset at a nominal price, or send the asset back to the lessor, or trade up to new and better equipment.	. Leasing and renting mean the municipality does not own the asset. If pride of ownership is important, these financing arrangements may be considered disadvantageous.
. Leasing and renting can be cheaper than debenture financing if the leasing company can pass on economies and discounts to the municipality. A cost/benefit analysis on payment options will show which option is the best buy.	. Leasing and renting can be more expensive than purchasing, especially if the municipality can use reserves, or can obtain a better borrowing rate than the lessor's or renter's cost of borrowing.

For more information, write or call any of the field offices of the Municipal Operations Division. They are located at these addresses.

CAMBRIDGE

150 Main Street
Cambridge, Ontario
N1R 6P9
(519) 622-1500

OSHAWA

74 Simcoe St. S.
Oshawa, Ontario
L1H 4G6
(416) 571-1515

GUELPH

147 Wyndham St. N.
4th Floor
Guelph, Ontario
N1H 4E9
(519) 836-2531

KINGSTON

1055 Princess St.
Kingston, Ontario
K7L 5T3
(613) 547-2203

LONDON

495 Richmond St.
London, Ontario
N6A 5A9
(519) 438-7255

OTTAWA

244 Rideau St.
Ottawa, Ontario
K1N 5T3
(613) 566-3711

NORTH BAY

347 Sherbrooke Street
North Bay, Ontario
P1B 2C1
(705) 476-4300

SUDBURY

430 Notre Dame Avenue
2nd Floor
Sudbury, Ontario
P3C 5K7
(705) 675-4343

ORILLIA

15B Matchedash St. N.
Orillia, Ontario
L3V 4T4
(705) 325-6144

THUNDER BAY

435 James St. S.
P.O. Box 5000
Thunder Bay, Ontario
P7C 5G6
(807) 475-1621

TORONTO

3rd Floor, Mowat Block
900 Bay Street
Queen's Park, Ontario
M7A 1C2
(416) 965-7031

Any question or comments regarding the contents of this publication may be addressed to the Ministry at the above Toronto address and telephone number.